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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,891

04/08/2004

Victor F. Man

1357US12

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7590

05/03/2007

ECOLAB INC.

MAIL STOP ESC-F7, 655 LONE OAK DRIVE
EAGAN, MN 55121

EXAMINER

KUMAR, PREETI

ART UNIT

PAPER NUMBER

1751

MAIL DATE

DELIVERY MODE

05/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/820,891	MAN ET AL.	
	Examiner	Art Unit	
	Preeti Kumar	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Non-Final Rejection

1. Claims 1-27 are pending. Claims 1 and 15 are independent.
2. The objection of claims 11-14 under 37 CFR 1.75(c), is withdrawn in light of applicants arguments clarifying that claims 1 is directed to enzyme activity of the product in claim 1, while claims 11-14 are directed to the physical stability of the product over time with is different from the enzyme activity of the product over time.
3. The rejection of claims 1-2, 4-16, 18-27 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wei et al. (WO 99/47631) is withdrawn upon further consideration.
4. The rejection of claims 1-27 under 35 U.S.C. 103(a) as being unpatentable over Linard et al. (US statutory invention registration H1776) in view of Blake et al. (US 5,648,329) is withdrawn upon further consideration.

Response to Arguments

5. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Priority

6. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is noted. However, the disclosure of the prior-filed application, Application No. 10/208,404 and 09/606,478, fail to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112

for one or more claims of this application. Specifically support for the limitation in claim 1 to the deterative enzyme retaining 75% of its initial enzyme activity at ambient temperature for at least about 25 days after forming the composition is not found in the prior applications to which Applicants are claiming benefit. Also, support for the limitation in claim 15 to the physical stability at room temperature for at least about 10 days after forming the composition is not found in the prior applications to which Applicants are claiming benefit.

New Grounds of Rejection

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1,11-13, 15 and 25-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1,11-13, 15, and 25-26 recite the limitation "...at least about ... days after forming the composition." This is indefinite because the limitation recited does not make clear or define the boundaries of the subject matter for which patent protection is sought. For example it is indefinite if Applicants are claiming limitation to at least 25 days or about 25 days?

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Man et al. (WO 02/02727).

Man et al. teach a liquid enzyme cleaning composition in which the enzyme is stable at alkaline pH and in the presence of water at concentrations of at least about 50 to about 60 weight percent. See abstract. Specifically, Man et al. teach a liquid enzyme cleaning composition comprising a surfactant; a deterative enzyme; 60% to about 80% by weight water; and 10% to about 20% by weight potassium borate, monoethanolammonium borate, diethanolammonium borate, triethanolammonium borate, or a combination thereof; the boric acid salt remaining dissolved in the cleaning composition at room temperature. See page 56, claims 48-49 and page 6, ln.15-25.

Regarding the limitation to retaining 75% of its initial enzyme activity at ambient temperature for at least about 25 days after forming the composition as recited by independent claim 1 and the limitation to physical stability for at least about 10 to at least about 21 days as recited by independent claim 15, Man et al. teach that the deterative enzyme retains at least about 80-100% of its initial activity at ambient temperature for at least about 30 days after forming the composition. See page 9,ln.9. Man et al. teach that varying the amount of boric acid salt, maintains stability of an enzyme and prevents enzyme degradation. See page 8-9.

Specifically regarding the enzyme, Man et al. teach protease, lipase, cellulase, peroxidase and amylases. See pages 11,ln.20-30.

Regarding the boric acid salt, Man et al. 10% to about 20% by weight potassium borate, monoethanolammonium borate, diethanolammonium borate, triethanolammonium borate, or a combination thereof which can act as stabilizing agents for the enzyme materials. See page 6,ln.20-25.

Man et al. teach the pH of the composition is about 9.0 to 10. See page 7,ln.1.

Man et al. teach the claimed alcohol alcoxylate, polyoxyethylene alkyl phosphate ester acid surfactants on page 25-43.

Man et al. teach various polyols and carbonate and bicarbonate builders and calcium ions. See page 45.

In table 1, on pages 47-48, Man et al. illustrate boric acid salt enzyme cleaning composition comprising 10% boric acid salt, 62-69% water and pH of 9-10. The prior art, Man et al. are silent as to the claimed properties wherein the deterative enzyme

retains 75% of its initial enzyme activity at ambient temperature for at least about 25 days after forming the composition as recited by independent claim 1 and to the claimed composition physical stability of for at least 10 days after forming the composition as recited by the instant independent claim 15.

It is reasonable to presume that said limitations are encompassed by the invention of Man et al. because the presumption is supported by the use of similar materials (i.e. a liquid enzyme cleaning composition comprising a surfactant, an enzyme, 10-20% boric acid salt, and 60-80% water) and having the similar pH to result in an analogous liquid composition which would reasonably be expected to have the claimed percent enzyme activity and physical stability for the claimed amount of time. *In re Fitzgerald*, 205 USPQ 594. Accordingly the teachings of Man et al. anticipate the material limitations of the instant claims.

In the alternative, the claimed 75% enzyme activity and the claimed physical stability of the liquid composition would obviously have been provided by the composition as disclosed by Man et al. because it is reasonable to presume that since the physically stable composition of Man et al. has 80% activity after 30 days, then it is reasonable to presume that said composition having the same components will be physically stable for at least 10 days and have 75% activity after 25 days. Furthermore, it would be obvious to a person skilled in the art to optimize the percent activity of the enzyme in the composition since Man et al. teach that varying the amount of boric acid salt, maintains stability of an enzyme and prevents enzyme degradation. See page 8-9.


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Conclusion

12. Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Mc Ginty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner Preeti Kumar PK.
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DOUGLAS MCGINTY
SUPERVISORY PATENT EXAMINER
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